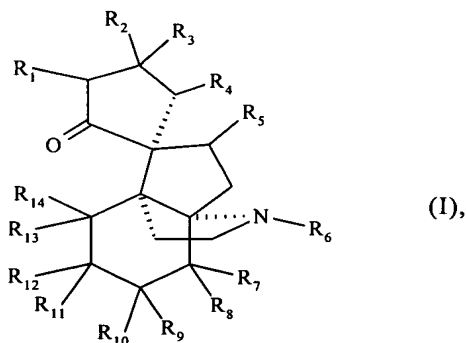




LISTING OF CLAIMS

Claims 1-18 (CANCELED)

19. (previously presented) A compound selected from those of formula (I) :



wherein

- R₁ and R₂ each represent hydrogen or together form an additional bond,
- R₃ represents hydrogen or alkoxy,
- R₄ represents hydrogen or hydroxy, alkoxy, alkylcarbonyloxy or arylcarbonyloxy,
- R₅ represents hydrogen or halogen,
- R₆ represents hydrogen or alkyl, alkylcarbonyl or aroyl,
- R₇ represents alkoxy,
- R₈ and R₉ together form an additional bond,
or R₈ and R₁₃ together form a sulphide bridge and, in that case, R₉ and R₁₀ together form
oxo and R₁₄ represents chlorine,
- R₁₀ represents alkoxy,
- R₁₁ represents hydroxy or alkoxy,
- R₁₂ represents hydrogen,
or R₁₁ and R₁₂ together form oxo, oxime or O-alkyl-oxime,
- and R₁₃ and R₁₄ each represent hydrogen or together form oxo,

with the proviso that the compound of formula (I) cannot represent :

- spiro[(4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
(acutumine)
- 5 - spiro[(4S,5S)-4-acetyl-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- spiro[(4S,5S)-4-acetyl-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
((2,3)-1-acetylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- spiro[(4S,5S)-4-(benzoyloxy)-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-
10 3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-
5-one]
- spiro[(4S,5S)-4-hydroxy-cyclopentan-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-
methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-ol]
- spiro[(4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-3aS,7aS-((2,3)-1-
15 methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- spiro[(4R,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- spiro[(4S,5S)-4(benzoyloxy)-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-
3aS,7aS-((2,3)-1 benzoylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-
20 5-one]
- spiro[(4S,5S)-4-acetyl-cyclopentan-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-
methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- spiro[4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
((2,3)-1*H*-pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- 25 (acutumidine)
- spiro[4R,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
((2,3)-1*H*-pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- spiro[(5S)-2-methoxy-2-cyclopenten-1-one-5:3-3aS,7aS-((2,3)-1*H*-pyrrolidine)-6,7-
dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one]
- 30 - spiro[(5S)-2-methoxy-2-cyclopenten-1-one-5:3-2-chloro-3aS,7aS-((2,3)-1*H*-
pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],

it being understood that

- "alkyl" means an alkyl group containing 1 to 6 carbon atoms which may be linear or branched,
- "alkoxy" means an alkyloxy group containing 1 to 6 carbon atoms which may be linear or branched,
- "aryloxy" means an aryloxy group wherein the aryl moiety represents phenyl or naphthyl,
- "aroyl" means an arylcarbonyl group wherein the aryl moiety represents phenyl or naphthyl,

its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically-acceptable acid or base.

20. (previously presented) A compound according to Claim 19, wherein R₁ and R₂, together form an additional bond, and R₈ and R₉ together form an additional bond.

21. (previously presented) A compound according to Claim 19, wherein the groups R₃, R₇ and R₁₀ each represent methoxy.

22. (previously presented) A compound according to Claim 19, wherein R₄ represents hydroxy, acetyloxy or benzoyloxy.

23. (previously presented) A compound according to Claim 19, wherein R₅ represents chlorine.

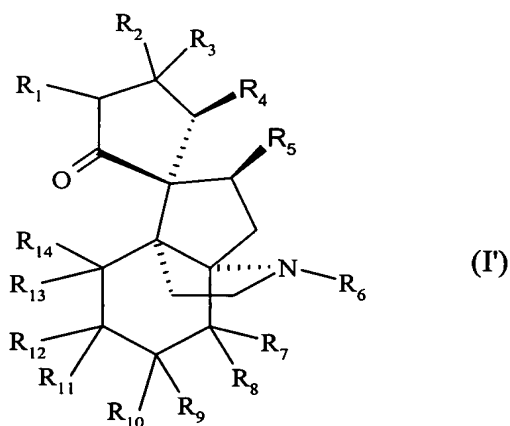
24. (previously presented) A compound according to Claim 19, wherein R₆ represents methyl or ethyl.

25. (previously presented) A compound according to Claim 19, wherein R₆ represents hydrogen.

26. (previously presented) A compound according to Claim 19, wherein R₁₁ and R₁₂ together form oxo.

27. (previously presented) A compound according to Claim 19, wherein R_{13} and R_{14} each represent hydrogen.

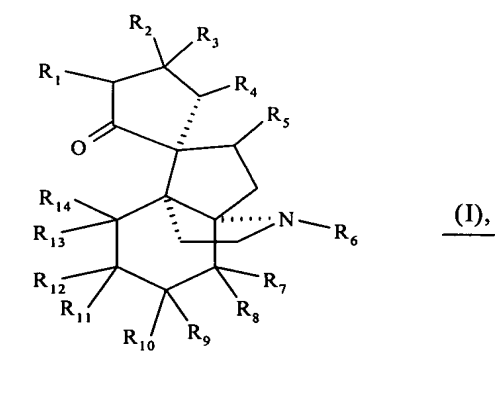
28. (previously presented) A compound according to Claim 19, wherein the compound has the configuration shown by formula (I) :



29. (previously presented) A compound according to Claim 19, which is selected from
 spiro[(4S,5S)-4-(ethoxycarbonyl)-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
 ((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5H-inden-5-one],
 spiro[(4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-
 ethyl-pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5H-inden-5-one],
 spiro[(4S,5S)-4-(ethoxycarbonyl)-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-
 ((2,3)-1-propanoylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5H-inden-5-one],
 spiro[(4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-
 methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5H-inden-5-one oxime],
 spiro[(4S,5S)-3,4-dimethoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-
 methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5H-inden-5-one],
 spiro[(4R,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-
 methylpyrrolidine)-6,7-dimethoxy-2,3,3a,7a-tetrahydro-4H,5H-indene-4,5-dione],
 spiro[(5S)-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-methyl-
 pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5H-inden-5-one],
 spiro[(4S,5S)-4-hydroxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-
 methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5H-inden-5-ol],
 spiro[(4R,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2,4-dichloro-3aS, and

7aS-((2,3)-1-methylpyrrolidine)-7-methoxy-8-thiabicyclo[2.2.1]-1,2,3,3a,4,7a-hexahydro-5H,6H-indene-5,6-dione], its enantiomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

30. (currently amended) A method for treating a living animal body, including a human, afflicted with ~~a condition selected from~~ deficiencies of memory associated with cerebral ~~aging ageing and with neurodegenerative diseases including Alzheimer's disease, Parkinson's disease, Pick's disease, Korsakoff's disease, and frontal lobe and subcortical dementias~~, comprising the step of administering to the living animal body, including a human, an amount of a compound ~~of Claim 19~~ selected from those of formula (I) :



wherein

- R₁ and R₂ each represent hydrogen or together form an additional bond,
- R₃ represents hydrogen or alkoxy,
- R₄ represents hydrogen or hydroxy, alkoxy, alkylcarbonyloxy or arylcarbonyloxy,
- R₅ represents hydrogen or halogen,
- R₆ represents hydrogen or alkyl, alkylcarbonyl or aroyl,
- R₇ represents alkoxy,
- R₈ and R₉ together form an additional bond,

or R₈ and R₁₃ together form a sulphide bridge and, in that case, R₉ and R₁₀ together form oxo and R₁₄ represents chlorine,

- R₁₀ represents alkoxy,
- R₁₁ represents hydroxy or alkoxy,
- R₁₂ represents hydrogen,

or R_{11} and R_{12} together form oxo, oxime or O-alkyl-oxime,

- and R_{13} and R_{14} each represent hydrogen or together form oxo,

it being understood that

- "alkyl" means an alkyl group containing 1 to 6 carbon atoms which may be linear or branched,
- "alkoxy" means an alkyloxy group containing 1 to 6 carbon atoms which may be linear or branched,
- "aryloxy" means an aryloxy group wherein the aryl moiety represents phenyl or naphthyl,
- "aroyl" means an arylcarbonyl group wherein the aryl moiety represents phenyl or naphthyl,

its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically-acceptable acid or base;

which is effective for alleviation of ~~the condition~~ deficiencies of memory associated with cerebral aging.

31. (currently amended) A pharmaceutical composition ~~useful for the treatment of deficiencies of memory associated with cerebral ageing and with neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, Pick's disease, Korsakoff's disease, and frontal lobe and subcortical dementias~~ comprising as active principle an effective amount of a compound of Claim 19 together with one or more pharmaceutically-acceptable excipients or vehicles.

32. (canceled)

33. (currently amended) A method according to Claim ~~32~~ 30, ~~comprising the step of administering to the living animal body, including a human, an amount of acutumine which is effective for alleviation of the condition~~ wherein the compound of formula (I) is acutumine.

34. (canceled)

35. (currently amended) A method according to Claim 32 30, wherein the ~~acutumine~~ compound of formula (I) is selected from:

5 spiro[(4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one] (acutumine),
 spiro[(4S,5S)-4-acetyl-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 spiro[(4S,5S)-4-acetyl-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-acetylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 10 spiro[(4S,5S)-4-(benzoyloxy)-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 spiro[(4S,5S)-4-hydroxy-cyclopentan-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-ol],
 15 spiro[(4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 spiro[(4R,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 spiro[(4S,5S)-4(benzoyloxy)-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1benzoylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 20 spiro[(4S,5S)-4-acetyl-cyclopentan-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1-methylpyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 spiro[4S,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1*H*-pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one] (acutumidine),
 25 spiro[4R,5S)-4-hydroxy-3-methoxy-2-cyclopenten-1-one-5:3(2S)-2-chloro-3aS,7aS-((2,3)-1*H*-pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one],
 spiro[(5S)-2-methoxy-2-cyclopenten-1-one-5:3-3aS,7aS-((2,3)-1*H*-pyrrolidine)-6,7-dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one], and
 spiro [(5S)-2-methoxy-2-cyclopenten-1-one-5:3-2-chloro-3aS,7aS-((2,3)-1*H*-pyrrolidine)-6,7-
 30 dimethoxy-1,2,3,3a,4,7a-hexahydro-5*H*-inden-5-one].

36. (canceled)